



DEVICE FOR FINELY DIVIDING AND DISPERSING GASEOUS BUBBLE

Publication number: JP58017823 (A)

Publication date: 1983-02-02

Inventor(s): ARAI KOUZOU; OOTSUKA YOSHITATSU; TANIMOTO SHIGEMI; SAKAGUCHI MASASHI

Applicant(s): SHOWA ALUMINIUM CO LTD

Classification:

- **International:** **B01F7/10; B01F3/04; C22B9/05; C22B21/06; B01F7/00; B01F7/02; B01F3/04; C22B9/00; C22B21/00; B01F7/00; (IPC1-7): B01F3/04; B01F7/10**

- **European:** B01F3/04C5

Application number: JP19810115540 19810722

Priority number(s): JP19810115540 19810722

Also published as:

JP60045929 (B)

JP1322457 (C)

Abstract of JP 58017823 (A)

PURPOSE: To finely disperse inert gas in the inside of liquid and to improve a gas-liquid contacting efficiency, by rotating a rotary body, having a flat bottom surface and grooves in its peripheral part, and feeding the inert gas from the lower part of said bottom surface, while dispersing the gas finely into the inside of the liquid. **CONSTITUTION:** Inert gas such as Ar is blown into a molten Al 4 filled into a tank 1 to remove gaseous hydrogen, etc. and non-metallic matters both contained in the molten Al 4 while entraining accompany said gas and nonmetallic matters by gas bubble. In this case, a rotary body 3 for finely dividing and dispersing the gas bubbles, which has a flat bottom surface 8 and an upper surface 7 formed into a projectingly spherical surface and a peripheral part 11 equipped with plural grooves, is rotated in the inside of the Al molten metal 4, and the inert gas is jetted from the lower central part of the surface 8 through an opening 10 of a gas feeding pipe 11. The inert gas moves to the peripheral part along the bottom surface of the body 3 by a centrifugal force and rises through the vertical grooves 12 to be divided into fine bubbles and rises in the molten metal 4 while being dispersed keeping an excellent contacting-efficiency.

